

WHAT IS CLAIMED IS:

1. A fluid friction clutch, comprising: a rotatably mounted shaft; a drive body which is mounted in a rotationally fixed manner on the shaft; an output body, mounted rotatably on the shaft and at least partially surrounding the drive body; a clutch region arranged between the drive body and output body, which accommodates a viscous fluid and can be used to couple drive body and output body in order to transmit a torque; a reservoir for at least largely holding the fluid positioned radially inside an outer periphery of the drive body; at least one first flow path and at least one second flow path for connecting the reservoir to the coupling area; at least one flow resistance element located at the outer periphery of the drive body and arranged between the first flow path and the second flow path, and a controllable device for selectively closing and opening at least one of these flow paths.
2. A fluid friction clutch, as claimed in claim 1, wherein the shaft comprises at least a first component connected in a non-positively locking manner to a drive unit and a second component held coaxially in the first component and being mounted rotatably with respect to this first component.
3. A fluid friction clutch as claimed in claim 2, wherein the first component comprises a drive shaft for the drive body and the second component comprises a control shaft for the device for selectively closing and opening the flow paths.
4. A fluid friction clutch as claimed in claim 1, wherein the drive body is connected in a non-positively locking manner to the drive shaft, and the

drive body, in the clutch region, has concentric projections which are arranged on the outer surfaces of the drive body.

5. A fluid friction clutch, in particular as claim 4, wherein the output body, in the clutch region, has inner, concentric projections which engage at a predetermined distance in the projections of the drive body.

6. A fluid friction clutch, as claimed claim 1, wherein the viscous fluid includes at least one fluid selected from the group of fluids consisting of a hydraulic oil, a silicone oil, silicone, a synthetic or natural polymer compound and a hydrocarbon compound.

7. A fluid friction clutch, as claimed in claim 1, wherein the reservoir for the fluid extends substantially in a cylindrical section in the clutch region inside the outer wall of the drive body.

8. A fluid friction clutch, as claimed in claim 1, wherein the flow paths are arranged on the radially outer side in the peripheral area of the drive body and are at a predetermined distance from the flow resistance element.

9. A fluid friction clutch, as claimed claim 1, wherein at least one flow path for the return flow of the fluid from the clutch region into the reservoir is arranged in front of the flow resistance element, as seen in the direction of rotation, and at least one flow path for the incoming flow of the fluid from the reservoir into the clutch region is arranged behind the flow resistance element, as seen in the direction of rotation.

10. A fluid friction clutch, as claimed claim 1, wherein the output body, on its inner periphery has a concentric recess running all the way around in the peripheral direction.
11. A fluid friction clutch, as claimed in claim 10, wherein the outer boundary of the flow resistance element engages at a predetermined distance into the recess, which runs all the way around in the peripheral direction, of the output body.
12. A fluid friction clutch, as claimed claim 10, wherein the flow resistance element engages in a substantially liquid-tight manner in the recess which runs all the way around in the peripheral direction.
13. A fluid friction clutch, as claimed claim 10, wherein the projections on the output body and/or on the drive body have at least one substantially radially arranged groove which at least partially interrupts the projections and is in fluid communication in the clutch region.
14. A fluid friction clutch, as claimed claim 1, wherein the contact surface area in the clutch region is altered as a function of the quantity of fluid.
15. A fluid friction clutch, as claimed claim 13, wherein the groove is arranged at a predetermined distance, in particular at a predetermined angle, with respect to the flow path.
16. A fluid friction clutch, as claimed claim 1, wherein the controllable device for selectively closing and opening the flow paths in a first position opens the flow path for the incoming flow of the fluid into the clutch

region and closes the return flow, and in a second position closes the incoming flow and opens the return flow.

17. A fluid friction clutch, as claimed claim 16, wherein the controllable device for selectively closing and opening the flow paths comprises a sealing element and a counterweight, which are arranged in a non-positively locking manner on the control shaft, and further comprises a restoring device, and wherein the sealing element is positioned at a predetermined distance from the inner contour of the drive body.

18. A fluid friction clutch, as claimed in claim 1, wherein the controllable device for selectively closing and opening has two sealing elements which are connected to the control shaft via an articulated joint and radially close off the flow paths.

19. A fluid friction clutch, as claimed in claim 1, wherein the controllable device for selectively closing and opening has two sealing elements for closing off flow paths, which are connected to the drive body via a lever, and wherein the sealing elements are positioned at a predetermined distance from the inner contour of the drive body.

20. A fluid friction clutch, as claimed in claim 1, wherein at least one of the flow paths can be closed off semi-radially by a sealing element.

21. A fluid friction clutch, as claimed in claim 1, wherein the position of the control shaft relative to the outer drive shaft is adjusted by means of an electromagnetically controlled torque device.

22. A fluid friction clutch, as claimed in claim 21, wherein the torque device comprises an armature connected in a non-positively locking manner to the control shaft, a ring connected in a non-positively locking manner to the drive shaft, and a coil arranged in a rotationally fixed manner in the housing.

23. A fluid friction clutch, as claimed in claim 21, further comprising a bearing device for bearing the output body on the shaft, and an electromagnetic control unit for controlling a controllable device for closing and opening one or more flow paths, and wherein the bearing device and the electromagnetic control unit are arranged on opposite sides of the drive body.

24. An appliance for operating a ventilating system which includes at least one fan, a drive unit, a connecting element and at least one appliance, as claimed in claim 1.

25. A motor vehicle including a motor and a cooling fan driven by the motor, and a fluid friction clutch for connecting the motor and cooling fan, wherein the fluid friction clutch is as claimed according to claim 1.